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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/436,796	11/08/1999	STEVEN R. DONOVAN	RIC99060	7148

25537 7590 01/12/2006

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EXAMINER

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ART UNIT PAPER NUMBER

2662

DATE MAILED: 01/12/2006

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/436,796
Filing Date: November 08, 1999
Appellant(s): DONOVAN ET AL.

MAILED
JAN 12 2006
GROUP 2600

Glenn Snyder
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/14/2005 appealing from the Office action mailed 6/21/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,069,890	WHITE et al.	5-2000
6,487,283	THOMAS et al.	11-2002
6,600,735	IWAMA et al.	12-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The Final Rejection filed 6/21/2005 is hereby reproduced for convenience:

Claim Rejections - 35 USC § 103

1. Claims 1, 2, 5-7, 15-17, 19, 20, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. (US006069890A), hereafter White, in view of Thomas et al. (US006487283B2), hereafter Thomas.

- In regards to Claims 1, 2, 6, 15, 16, 19, 20, 22, 23, and 26,

White discloses a system and method where public switched telephone networks utilize program controlled switching systems arranged in an architecture with the Internet to provide telephone services (Abstract; claim 1, 16, 19 – method/system for routing calls to an available destination gateway to establish a call in a telecom network between source user agent and destination user agent over a path supported by a telephone network and IP network).

Referring to Fig. 4, White discloses the ability to establish a call between a source user 100 and destination user 118 located in different public switched telephone systems (LEC 102 and 114) through the Internet 106, which is shown to have multiple gateway routers 104/116/120 for ingress and egress. The ingress gateway router 104 acts as a proxy server for establishing a call from the source user by querying the Internet Address Database 112 (redirect server) for the address of the particular

destination gateway (Col. 7-8, lines 45-20; claim 1,16 – IP network includes plurality of ingress and destination gateways, proxy server, and redirect server).

White shows that source 100 initiates a call by dialing the directory number of the called party 118 (destination; Col. 8, lines 30-32; claim 1,16,19 – receiving setup request that identifies a destination user agent in a PSTN at proxy server from a source user agent in a PSTN).

The LEC 105 of the source 100 connects the call to the gateway router 104, which then queries the Internet address database 112 to obtain the Internet address of the destination gateway 116 (Col. 8, lines 32-62; claim 1 – forwarding request to redirect server; claim 1,16 – receiving routing information or a request failure response from the redirect server).

Using the address information from the Internet address database 112, the gateway router 104 uses the address to communicate the call connection request to the destination gateway router 116, which can communicate with the destination user 118 through LEC 114 (Col. 8, lines 62-65; claim 1,19 – proxying request by the proxy server to a destination gateway selected from the routing information received from the redirect server, selected destination gateway can communicate with a PSTN including the destination user agent).

White does not explicitly disclose waiting a predetermined time for a response from the destination gateway, whereupon the connection is established with the responsive

gateway or the request is repeatedly sent to succeeding gateways capable of communicating with the destination user until the connection is made.

Thomas discloses an IP routing engine that is able to locate eligible (in-service) destination gateways capable of terminating a voice over IP call by working through a prioritized list of eligible destination gateways until the call is established. Thomas further shows that predetermined preferences (status information) such as delay tolerance and number of attempts for establishing the call may be setup through the system's clearinghouse 50 (network management system; Abstract; Fig. 2; Col. 6-8, lines 37-64; claim 1,19 – upon proxying, waiting for a response from the selected destination gateway for a predetermined time; claim 1,19 – upon receiving the response within a predetermined time, establishing a communication session using the selected destination gateway; claim 1,19 – if response is not received within predetermined time, sending the call setup request to a succeeding destination gateway selected from the routing information and reporting failure of the selected destination gateway to the redirect server, wherein the succeeding gateway can communication with a PSTN including the destination user agent; claim 2,20 – repeating the method steps of proxying/waiting until a destination gateway is determined to be available or until all destination gateways from the routing information have been determined to be unavailable; claim 6 – counting a number of received requests subsequent to call setup request being received at the proxy server; claim 15 – resending the setup request to the selected destination gateway a predetermined number of times when the response is not received within the predetermined time; claim 16 – network management system

in communication with proxy server for receiving and storing status changes of destination gateways; claim 22 – status of destination gateway determined to be available is in-service; claim 23,26 – routing information identifies at least one destination gateway that can handle the call according to status information tracked by the redirect server)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system and method of White by providing a prioritized list of eligible destination gateways for establishing a call between a source and a particular destination based on tracked status information of the destination gateways, as taught by Thomas, thus increasing the success rate of completing the call if the optimal destination gateway is unavailable and also enabling routing options based on availability and pricing.

- In regards to Claim 5,

White discloses a system and method where public switched telephone networks utilize program controlled switching systems arranged in an architecture with the Internet to provide telephone services that covers all limitations of the parent claims.

White shows that the source user 100 dials “*82” in order to address the subsequent called party digits to the gateway router to be processed as an Internet call (Col. 8, lines 21-44; claim 5 – receiving setup request at the proxy server includes addressing the setup request to a proxy address of the proxy server).

- In regards to Claims 24, 25, 27, and 28,

White discloses a system and method where public switched telephone networks utilize program controlled switching systems arranged in an architecture with the Internet to provide telephone services that covers all limitations of the parent claims.

White shows that the request for establishing the call sent from the gateway router 104 to the destination router 116 specifies the IP address of the destination gateway (Col. 8-9, lines 45-10; claim 24,27 – setup request identifies the destination user agent by specifying the address of the destination user agent; claim 25,28 – address includes the real IP address of the destination user agent).

- In regards to Claims 7 and 17,

White discloses a system and method where public switched telephone networks utilize program controlled switching systems arranged in an architecture with the Internet to provide telephone services that covers all limitations of the parent claims.

White does not explicitly disclose a proxy server comprising a SIP proxy server.

The Examiner takes Official Notice that it has been common practice in the art to utilize session initiation protocol (SIP) and other similar internetworking protocols, such as H.323, for establishing voice over IP calls between different domains (claim 7,17 – proxy server comprises a SIP proxy server).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and system of White by utilizing a SIP proxy server, which, is an industry-standard protocol for establishing voice over IP calls between

different domains, thereby providing the method and system of White with compatibility and address translation between the source and destination PSTNs and the Internet domain.

2. Claims 3, 4, 8-10, 13, 14, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over White in view of Thomas as applied to claims 1, 16, and 19 above, and further in view of Iwama et al. (US006600735B1), hereafter Iwama.

- In regards to Claims 3, 4, 8-10, 13, 14, 18, and 21,

White discloses a system and method where public switched telephone networks utilize program controlled switching systems arranged in an architecture with the Internet to provide telephone services that covers all limitations of the parent claims.

Neither White nor Thomas discloses recording the status of a destination gateway as out-of-service in a status information table when a response is not received within a predetermined time. White and Thomas also do not explicitly show a proxy server comprising an H.323 gatekeeper.

Iwama discloses an Internet telephone connection method for performing call connection to a PSTN through a gateway device (Col. 1, lines 7-10). Referring to Figs. 7 and 10, Iwama shows that the service status of a group of potential destination gateways is determined for completing a call to a destination utilizing an H.323 gatekeeper. When a preferred gateway is unavailable for connecting the call, it is registered to the source in a network database as "out of service" (Col. 4, lines 22-48;

Col. 10, lines claim 3,21 – recording a destination gateway status as out-of-service if the response is not received within the predetermined time; claim 4 – recording destination gateway status as out-of-service in a gateway information table stored within the redirect server; claim 8,18 – proxy server comprises an H.323 gatekeeper; claim 9 – responding to the forwarded setup request from the proxy server received at the redirect server includes determining the status of a group of destination gateways; claim 10 – status is one of in-service or out-of-service; claim 13 – sending a message from the proxy server to a network manager to record the status of a destination gateway; claim 14 – forwarding a request failure response to the source user).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and system of White in view of Thomas to record the status of a destination gateway as “out of service” in a network database if a connectability problem prevents a response to the proxy request within a predetermined time or “in-service” if the connection is properly established and functional, as taught by Iwama. This would prevent subsequent attempts to unavailable gateway devices until the connectability problem is corrected and the gateway can be returned to “in service” status.

(10) Response to Argument

Appellant's arguments on pgs. 7-27 of the Brief filed 10/14/2005 have been fully considered but they are not persuasive.

- On pgs. 8-10 of the Brief regarding claims 1, 5-7, 24, and 25, pg. 14 regarding claim 2, pgs. 15-16 regarding claims 23 and 26, pgs. 16-18 regarding claim 16, and pg. 24 regarding claim 20, Appellant contends that the Internet address table 112 disclosed by White is not equivalent to an IP redirect server as claimed in independent claims 1, 16, and 19. Appellant contends that the Internet address table 112 in White does not receive any call setup requests as required by the claimed redirect server.
- The Examiner respectfully disagrees. As shown in the Final Rejection filed 6/21/2005, the Internet address table 112 disclosed by White meets all the limitations that defines an IP redirect server as claimed. Referring to Fig. 4 of White, when establishing a call with a destination user 118 over the Internet is desired, user 100 goes off hook, dials an Internet call prefix followed by the destination user's directory number, which is received by the gateway router 104. The gateway router 104 then forwards this received "call setup request" to the Internet address table 112, which returns information on the appropriate destination gateway for completing the call to the destination user. Therefore, as shown, the Internet address table 112 of White performs all of the defining function of the claimed IP redirect server.
- On pgs. 10-13 of the Brief regarding claims 1, 5-7, 24 and 25, pg. 15 regarding claims 15 and 23, and pgs. 22-24 regarding claims 19 and 22, Appellant contends that Thomas does not disclose sending the call setup request to a

succeeding destination gateway selected from the routing information if a response is not received from the current destination gateway within a predetermined time. Appellant further contends that Thomas does not disclose reporting failure of the current destination gateway to the redirect server.

- The Examiner respectfully disagrees. Thomas discloses that a source gateway responsible for establishing an IP telephony call to a destination may be provided a prioritized list of eligible destination gateways from an IP routing engine. Thomas further discloses that the source gateway “works through” the list of gateways until the call is established. It is inherent in this disclosure of Thomas that a call setup request will be sent to a succeeding gateway in the prioritized list if a response from the current gateway does not result in the establishment of the call within a predetermined time, as required by Appellant’s claims. The prioritized list of Thomas would serve no purpose if the source gateway was configured to wait indefinitely for a response from a selected destination gateway before moving on the next destination gateway on the list. Regarding the disclosure of “reporting failure”, Thomas shows in column 9, lines 19-23 and column 10, lines 33-39 that the prioritized list provided to the source gateway may be ordered according to preferences that include historical availability. This disclosure of Thomas illustrates that failed call attempts to destination gateways are reported to the IP routing engine for use in the creation of subsequent prioritized lists.

- On pgs. 13-14 of the Brief, Appellant contends that the combination of White and Thomas is improper because it combines unrelated references through retrospective assessment of the claimed invention and that no portion of either reference provides objective motivation for the combination of White and Thomas.
- The Examiner respectfully disagrees. White and Thomas both pertain to the establishment of an IP telephony call between a source user and destination user through corresponding gateways, therefore White and Thomas are analogous. The disclosure of Thomas provides the proper motivation for combining the references because Thomas discusses at length the advantages of providing a source gateway with a prioritized list of potential destination gateways for completing the call, rather than just one destination gateway. Utilizing this "list" approach in White would provide these advantages to the method and system of White – namely, the ability to differentiate between multiple eligible gateways serving the destination user based on cost, historical availability, etc., as well as enabling call establishment when the preferred destination gateway is unexpectedly unavailable or fails. See Thomas; Col. 7, lines 58 – Col. 11, line 5, which discusses the preferences and corresponding benefits used for creating the prioritized list(s).
- On pg. 15 of the Brief regarding claim 15, Appellant contends that neither Thomas nor White discloses call establishment by resending the call setup

request to the selected destination gateway a predetermined number of times when the response is not received within the predetermined time.

- The Examiner respectfully disagrees. As shown above, the disclosure of Thomas illustrates that working through the prioritized list of eligible destination gateways by the source gateway inherently includes sending the call setup request to a succeeding destination gateway if no response is received within a predetermined time, since the possibility of a non-response from a selected destination gateway is the reason for having a list of eligible gateways in the first place. Continuing from that aspect, it is necessary to interpret the system and method of Thomas by the standards generally accepted in the art. When an initial attempt to establish a call fails - for example, a user attempting to connect to an ISP – subsequent attempts, at predetermined intervals, will be made to establish the call until the attempt's timeout (or "predetermined time"). Similarly, the disclosure illustrated above in Thomas shows that an attempt to establish a call with a particular gateway would be done by sending (and resending) the call setup request to that destination gateway until it is necessary to move on to the succeeding gateway.

- On pg. 18 of the Brief regarding claim 16 and pg. 21 regarding claims 19 and 22, Appellant contends that interpreting the clearinghouse 50 in Thomas as the claimed "network management system" is improper because Thomas does not receive and store "status changes of destination gateways" as claimed.

- The Examiner respectfully disagrees. As shown above, Thomas discloses that the prioritized list of eligible destination gateways may be created with regards to preference criteria. Thomas shows that the preference criteria includes “historical availability” of the gateways in the network (Col. 9, lines 18-23 and Col. 10, lines 33-39) and, therefore, meets the limitation of receiving and storing “status changes of destination gateways” as claimed.
- On pg. 20 of the Brief regarding claim 17, Appellant contends that the gateway router 104 of White cannot be modified to be a SIP proxy server based on the Official Notice taken in the Final Office Action filed 6/21/2005, stating that SIP is used to establish voice over IP calls between domains.
- The Examiner respectfully disagrees. For all of the above claim rejections, the Examiner has interpreted the gateway router 104 of White to be equivalent to the an “IP proxy server” in that it performs all the functions of the IP proxy server claimed by the Appellant with regards to handling of call setup requests and establishing the corresponding calls. Official Notice was taken to show that modifying the general “IP proxy server” in White to a protocol-specific server, in this case the well-known SIP protocol, would be obvious to one of ordinary skill in the art. It is noted that Appellant did not challenge the Official Notice assertion in the subsequent response from which the common knowledge statement was made. Appellant also admits on pg. 20 of the Brief that it is known that SIP can

be used in establishing calls over the Internet. As such, the rejection of claim 17 based on Official Notice is proper.

- On pg. 25-26 of the Brief regarding claims 3, 4, 8-10, 13, 14, 18, and 21, Appellant contends that the motivation to combine Iwama with White and Thomas would not have been obvious absent impermissible hindsight.
- The Examiner respectfully disagrees. As shown above in regards to the combination of White and Thomas, the three references included in these rejections are analogous because they each pertain to performing call connection through a gateway device. Iwama discloses specific features for completing call connection utilizing an H.323 gatekeeper and status-tracking of gateways in the network, as well as the advantages associated with such an implementation. Combining Iwama with White and Thomas would provide these functional advantages to the corresponding elements already present in the method and system of White and Thomas.

For the above reasons, it is believed that the rejections should be sustained.

(11) Related Proceeding(s) Appendix

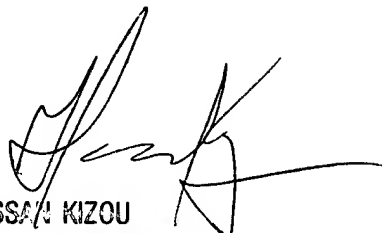
No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Respectfully submitted,

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1/6/2005


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